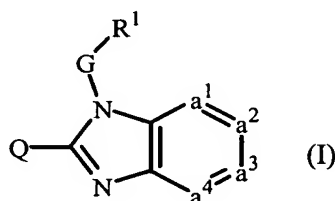


This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims

1. *(previously presented)* A compound of formula

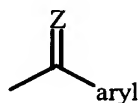


an *N*-oxide, addition salt, quaternary amine, metal complex or stereochemically isomeric form thereof

wherein $-a^1=a^2-a^3=a^4-$ represents a bivalent radical of formula

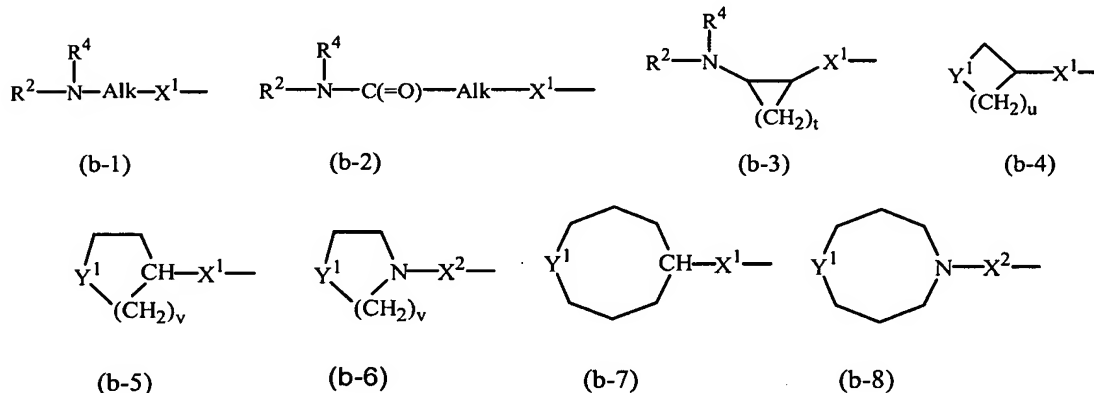


wherein each hydrogen atom in the radical (a-1) may optionally be replaced by halo, C₁₋₆alkyl, nitro, amino, hydroxy, C₁₋₆alkyloxy, polyhaloC₁₋₆alkyl, carboxyl, aminoC₁₋₆alkyl, mono- or di(C₁₋₄alkyl)aminoC₁₋₆alkyl, C₁₋₆alkyloxycarbonyl, hydroxyC₁₋₆alkyl, or a radical of formula



wherein =Z is =O, =CH-C(=O)-NR^{5a}R^{5b}, =CH₂, =CH-C₁₋₆alkyl, =N-OH or =N-O-C₁₋₆alkyl;

Q is a radical of formula



wherein

Alk is C₁₋₆alkanediyl;

Y¹ is a bivalent radical of formula -NR²- or -CH(NR²R⁴)-;

X¹ is NR⁴, S, S(=O), S(=O)₂, O, CH₂, C(=O), C(=CH₂), CH(OH), CH(CH₃), CH(OCH₃), CH(SCH₃), CH(NR^{5a}R^{5b}), CH₂-NR⁴ or NR⁴-CH₂;

X² is a direct bond, CH₂, C(=O), NR⁴, C₁₋₄alkylene-NR⁴, or NR⁴-C₁₋₄alkylene;

t is 2, 3, 4 or 5;

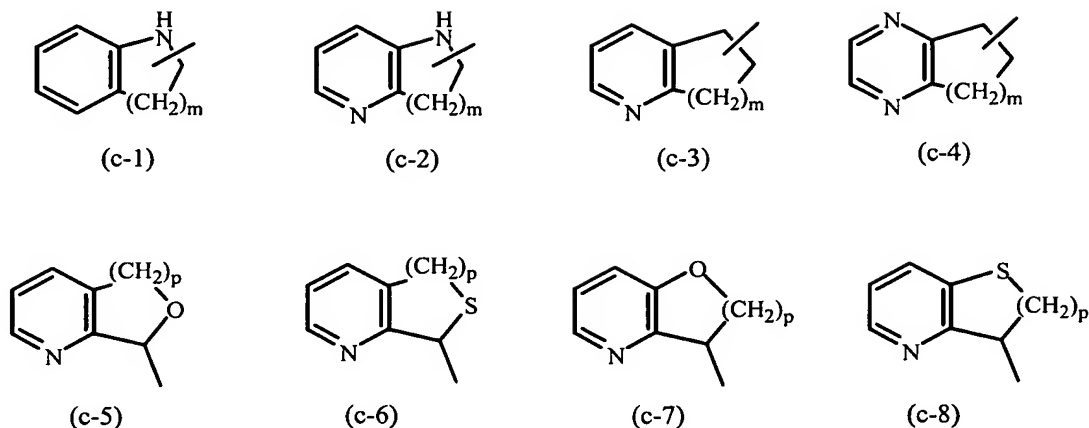
u is 1, 2, 3, 4 or 5;

v is 2 or 3; and

whereby each hydrogen atom in Alk and the carbocycles and the heterocycles defined in radicals (b-3), (b-4), (b-5), (b-6), (b-7) and (b-8) may optionally be replaced by R³; with the proviso that when R³ is hydroxy or C₁₋₆alkyloxy, then R³ can not replace a hydrogen atom in the α position relative to a nitrogen atom;

G is a direct bond or C₁₋₁₀alkanediyl optionally substituted with one, two or three substituents selected from hydroxy, C₁₋₆alkyloxy, arylC₁₋₆alkyloxy, C₁₋₆alkylthio, arylC₁₋₆alkylthio, arylcarbonyl, HO(-CH₂-CH₂-O)_n-, C₁₋₆alkyloxy(-CH₂-CH₂-O)_n-, arylC₁₋₆alkyloxy(-CH₂-CH₂-O)_n-, amino, mono-or di(C₁₋₆alkyl)amino, C₁₋₆alkyloxycarbonylamino and aryl;

R¹ is a bicyclic heterocycle selected from quinoliny, quinoxaliny, benzofurany, benzothiény, benzimidazolyl, benzoxazolyl, benzthiazolyl, pyridopyridyl, naphthyridiny, 1*H*-imidazo[4,5-*b*]pyridiny, 3*H*-imidazo[4,5-*b*]pyridiny, imidazo[1,2-*a*]pyridiny, 2,3-dihydro-1,4-dioxino[2,3-*b*]pyridyl or a radical of formula



and said bicyclic heterocycles may optionally be substituted in either of the two cycles with 1 or where possible more substituents selected from halo, hydroxy, amino, cyano, carboxy, C₁₋₆alkyl, C₁₋₆alkyloxy, C₁₋₆alkylthio, C₁₋₆alkyloxyC₁₋₆alkyl, aryl, arylC₁₋₆alkyl, arylC₁₋₆alkyloxy, hydroxyC₁₋₆alkyl, mono-or di(C₁₋₆alkyl)amino, mono-or di(C₁₋₆alkyl)aminoC₁₋₆alkyl, polyhaloC₁₋₆alkyl, C₁₋₆alkylcarbonylamino, C₁₋₆alkyl-SO₂-NR^{5c}-, aryl-SO₂-NR^{5c}-, C₁₋₆alkyloxycarbonyl, -C(=O)-NR^{5c}R^{5d}, HO(-CH₂-CH₂-O)_n-, halo(-CH₂-CH₂-O)_n-, C₁₋₆alkyloxy(-CH₂-CH₂-O)_n-, arylC₁₋₆alkyloxy(-CH₂-CH₂-O)_n- and mono-or di(C₁₋₆alkyl)amino(-CH₂-CH₂-O)_n-;

each n independently is 1, 2, 3 or 4;

each m independently is 1 or 2;

each p independently is 1 or 2;

each R² independently is hydrogen, formyl, C₁₋₆alkylcarbonyl, Hetcarbonyl, pyrrolidinyl, piperidinyl, homopiperidinyl, C₃₋₇cycloalkyl substituted with N(R⁶)₂, or C₁₋₁₀alkyl substituted with N(R⁶)₂ and optionally with a second, third or fourth substituent selected from amino, hydroxy, C₃₋₇cycloalkyl, C₂₋₅alkanediyl (wherein said C₂₋₅alkanediyl is substituted on one carbon atom of said C₁₋₁₀alkyl substituted with N(R⁶)₂ to form a spiro moiety), piperidinyl, mono-or di(C₁₋₆alkyl)amino, C₁₋₆alkyloxycarbonylamino, aryl and aryloxy;

R³ is hydrogen, hydroxy, C₁₋₆alkyl, C₁₋₆alkyloxy, arylC₁₋₆alkyl or arylC₁₋₆alkyloxy;

R⁴ is hydrogen, C₁₋₆alkyl or arylC₁₋₆alkyl;

R^{5a}, R^{5b}, R^{5c} and R^{5d} each independently are hydrogen or C₁₋₆alkyl; or

R^{5a} and R^{5b} , or R^{5c} and R^{5d} taken together form a bivalent radical of formula $-(CH_2)_s-$ wherein s is 4 or 5;

R^6 is hydrogen, C_{1-4} alkyl, formyl, hydroxy C_{1-6} alkyl, C_{1-6} alkylcarbonyl or C_{1-6} alkyloxycarbonyl;

aryl is phenyl or phenyl substituted with 1 or more substituents selected from halo, hydroxy, C_{1-6} alkyl, hydroxy C_{1-6} alkyl, polyhalo C_{1-6} alkyl, and C_{1-6} alkyloxy; and

Het is pyridyl, pyrimidinyl, pyrazinyl, or pyridazinyl.

2. *(cancelled)*

3. *(previously presented)* A compound according to claim 1, wherein Q is a radical of formula (b-5) wherein v is 2 and Y^1 is $-NR^2-$.

4. *(previously presented)* A compound according to claim 1, wherein R^2 is C_{1-10} alkyl substituted with NHR^6 .

5. *(previously presented)* A compound according to claim 1, wherein G is a direct bond or C_{1-10} alkanediyl optionally substituted with one, two or three substituents selected from the group consisting of hydroxy, C_{1-6} alkyloxy, aryl C_{1-6} alkyloxy, $HO(-CH_2-CH_2-O)_n-$, C_{1-6} alkyloxy $(-CH_2-CH_2-O)_n-$, and aryl C_{1-6} alkyloxy $(-CH_2-CH_2-O)_n-$.

6. *(previously presented)* A compound wherein the compound is

$(\pm)-N$ -[1-(2-aminoethyl)-4-piperidinyl]-4-methyl-1-[1-(8-quinolinyl)ethyl]-*1H*-benzimidazol-2-amine monohydrate;

$(\pm)-N$ -[1-(2-amino-3-methylbutyl)-4-piperidinyl]-1-(2-bromo-5,6,7,8-tetrahydro-8-quinolinyl)-*1H*-benzimidazol-2-amine trihydrochloride trihydrate;

$(\pm)-N$ -[1-(2-amino-3-methylbutyl)-4-piperidinyl]-1-[(2-ethoxyethoxy)-8-quinolinylmethyl]-4-methyl-*1H*-benzimidazol-2-amine;

$(\pm)-N$ -[1-(2-amino-3-methylbutyl)-4-piperidinyl]-1-(2-chloro-5,6,7,8-tetrahydro-5-quinoxaliny)-*1H*-benzimidazol-2-amine trihydrochloride trihydrate;

(±)-*N*-[1-(2-amino-3-methylbutyl)-4-piperidinyl]-1-[(1-methyl-1*H*-benzimidazol-4-yl)methyl]-1*H*-benzimidazol-2-amine;

(±)-*N*-[1-(2-amino-3-methylbutyl)-4-piperidinyl]-1-(ethoxy-8-quinolinylmethyl)-1*H*-benzimidazol-2-amine;

(±)-*N*-[1-(2-amino-3-methylbutyl)-4-piperidinyl]-4-methyl-1-(5,6,7,8-tetrahydro-5-quinoxaliny)-1*H*-benzimidazol-2-amine;

N-[1-(2-aminoethyl)-4-piperidinyl]-4-methyl-1-(8-quinolinylmethyl)-1*H*-benzimidazol-2-amine;

N-[1-(8-quinolinylmethyl)-1*H*-benzimidazol-2-yl]-1,3-propanediamine trihydrochloride monohydrate;

(±)-*N*-[1-(2-aminoethyl)-4-piperidinyl]-1-[(2-ethoxyethoxy)-8-quinolinylmethyl]-1*H*-benzimidazol-2-amine trihydrochloride dihydrate;

(±)-*N*-[1-[1-(aminomethyl)-2-methylpropyl]-4-piperidinyl]-1-[(2-ethoxyethoxy)-8-quinolinylmethyl]-1*H*-benzimidazol-2-amine;

(±)-*N*-[1-(2-amino-3-methylbutyl)-4-piperidinyl]-1-(1-isoquinolinylmethyl)-1*H*-benzimidazol-2-amine trihydrochloride trihydrate;

N-[1-(2-aminoethyl)-4-piperidinyl]-1-(5,6,7,8-tetrahydro-5-quinoxaliny)-1*H*-benzimidazol-2-amine trihydrochloride trihydrate;

(±)-*N*-[1-(2-amino-3-methylbutyl)-4-piperidinyl]-4-methyl-1-(8-quinolinylmethyl)-1*H*-benzimidazol-2-amine;

(±)-*N*-[1-(2-aminoethyl)-4-piperidinyl]-1-(2-chloro-5,6,7,8-tetrahydro-5-quinoxaliny)-4-methyl-1*H*-benzimidazol-2-amine trihydrochloride trihydrate;

(±)-*N*-[1-(2-aminoethyl)-4-piperidinyl]-1-(5,6,7,8-tetrahydro-2,3-dimethyl-5-quinoxaliny)-1*H*-benzimidazol-2-amine trihydrochloride trihydrate;

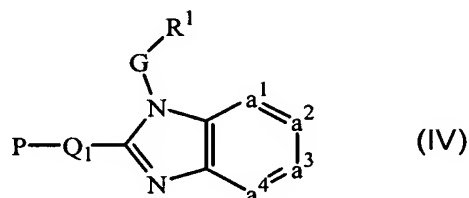
(±)-*N*-[1-(2-amino-3-methylbutyl)-4-piperidinyl]-1-[(2-ethoxyethoxy)-8-quinolinylmethyl]-1*H*-benzimidazol-2-amine;

(±)-*N*-[1-(2-amino-3-methylbutyl)-4-piperidinyl]-1-(3-chloro-5,6,7,8-tetrahydro-5-quinoxaliny)-1*H*-benzimidazol-2-amine trihydrochloride monohydrate;

(±)-*N*-[1-(2-aminoethyl)-4-piperidinyl]-1-(3-chloro-5,6,7,8-tetrahydro-5-quinoxaliny)-4-methyl-1*H*-benzimidazol-2-amine trihydrochloride dihydrate;

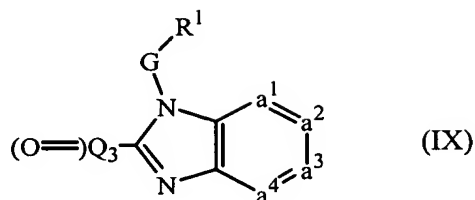
(±)-*N*-[1-(2-aminoethyl)-4-piperidinyl]-1-[(2-ethoxyethoxy)-8-quinolinylmethyl]-4-methyl-1*H*-benzimidazol-2-amine monohydrate;
(±)-*N*-[1-(2-amino-3-methylbutyl)-4-piperidinyl]-4-methyl-1-[(1-methyl-1*H*-benzimidazol-4-yl)methyl]-1*H*-benzimidazol-2-amine;
(±)-*N*-[1-(2-amino-3-methylbutyl)-4-piperidinyl]-1-(2-chloro-5,6,7,8-tetrahydro-5-quinoxaliny)-4-methyl-1*H*-benzimidazol-2-amine;
((1-isoquinolin-1-ylmethyl)-1*H*-benzoimidazol-2-yl)-piperidin-4-yl-amine;
(1-(4-(1-isoquinolin-1-ylmethyl)-1*H*-benzoimidazol-2-ylamino)-piperidin-1-ylmethyl)-2-methyl-propyl)-carbamic acid tert-butyl ester; or
an *N*-oxide, addition salt, quaternary amine, metal complex or stereochemically isomeric form thereof.

7. *(previously presented)* A method of treating a respiratory syncytial viral infection, comprising the step of administering a therapeutically effective amount of a compound as claimed in any one of claims 1 and 3 to 6.
8. *(previously presented)* A pharmaceutical composition, comprising a pharmaceutically acceptable carrier, and as active ingredient a therapeutically effective amount of a compound as claimed in any one of claims 1 and 3 to 6.
9. *(previously presented)* A process of preparing a composition as claimed in claim 8, comprising the step of intimately mixing said carrier with said compound.
10. *(original)* An intermediate of formula



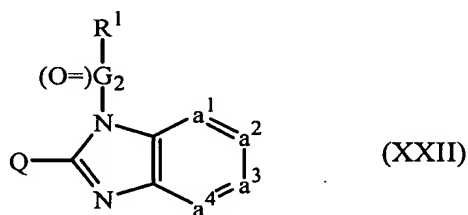
with R^1 , G and $-a^1=a^2-a^3=a^4-$ defined as in claim 1, P being a protective group, and Q_1 being defined as Q according to claim 1 but being devoided of the R^2 or R^6 substituent.

11. *(original)* An intermediate of formula



with R^1 , G and $-a^1=a^2-a^3=a^4-$ defined as in claim 1, and $(O=)Q_3$ being a carbonyl derivative of Q, said Q being defined according to claim 1, provided that it is devoided of the NR^2R^4 or NR^2 substituent.

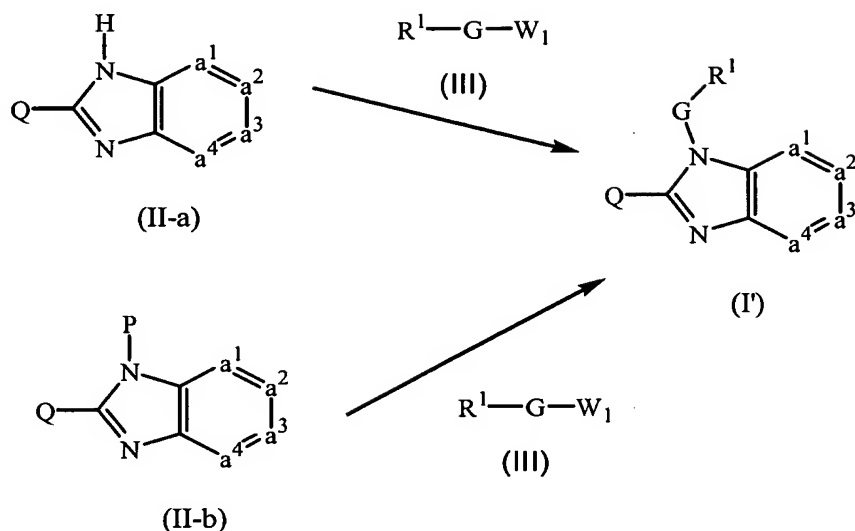
12. *(original)* An intermediate of formula



with R^1 , Q and $-a^1=a^2-a^3=a^4-$ defined as in claim 1, and $(O=)G_2$ being a carbonyl derivative of G, said G being defined according to claim 1.

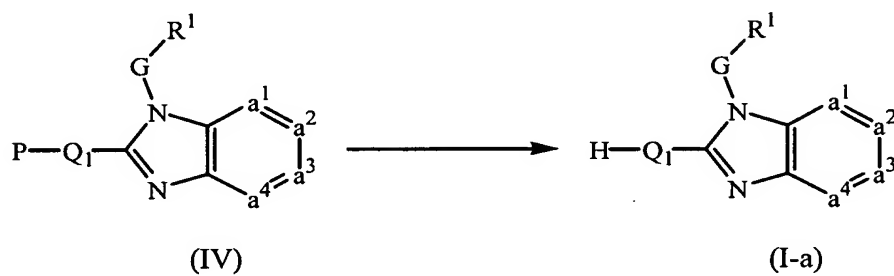
13. *(previously presented)* A process of preparing a compound as claimed in claim 1, comprising at least one step selected from the group consisting of:

- a) reacting an intermediate of formula (II-a) or (II-b) with an intermediate of formula (III)



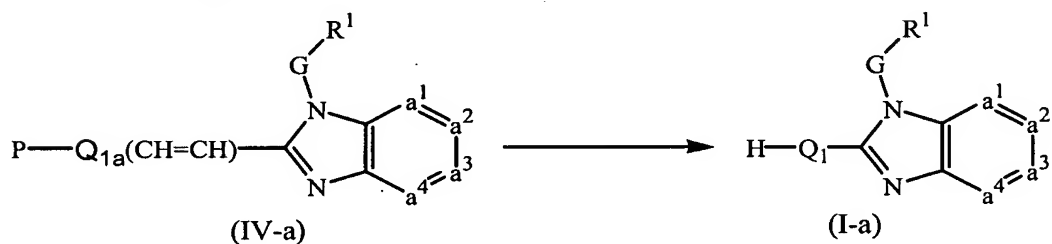
with R^1 , G, Q and $-a^1=a^2-a^3=a^4-$ defined as in claim 1, and W_1 being a suitable leaving group, in the presence of a suitable base and in a suitable reaction-inert solvent;

- b) deprotecting an intermediate of formula (IV)



with R^1 , G, and $-a^1=a^2-a^3=a^4-$ defined as in claim 1, $H-Q_1$ being defined as Q according to claim 1 provided that R^2 or at least one R^6 substituent is hydrogen, and P being a protective group;

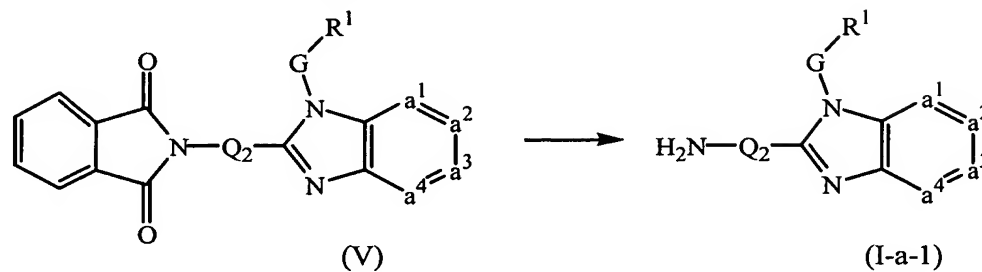
- c) deprotecting and reducing an intermediate of formula (IV-a)



with R^1 , G, and $-a^1=a^2-a^3=a^4-$ defined as in claim 1, $H-Q_1$ being defined as Q according to claim 1 provided that R^2 or at least one R^6 substituent is

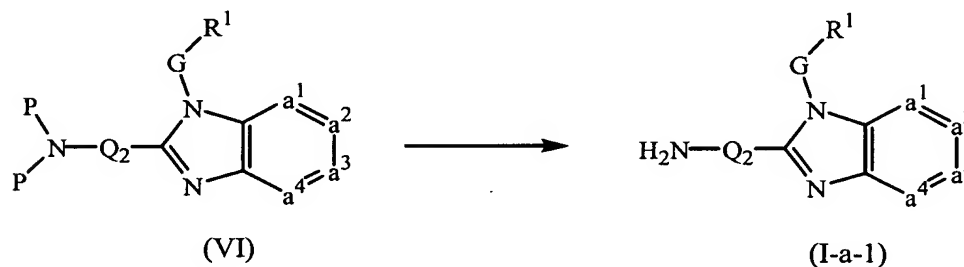
hydrogen, $Q_{1a}(CH=CH)$ being defined as Q_1 provided that Q_1 comprises an unsaturated bond, and P being a protective group;

- d) deprotecting an intermediate of formula (V)



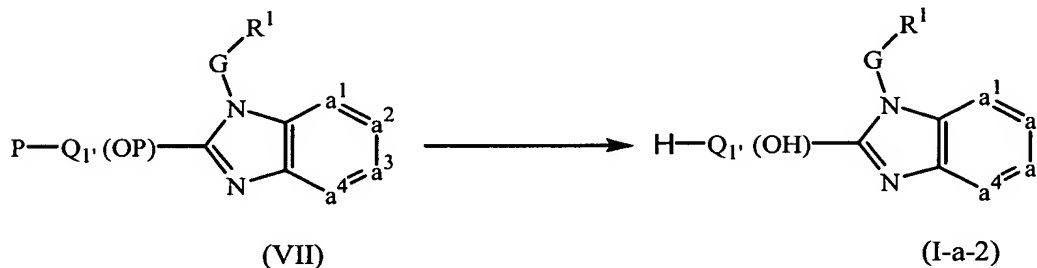
with R^1 , G, and $-a^1=a^2-a^3=a^4-$ defined as in claim 1, and H_2N-Q_2 being defined as Q according to claim 1 provided that both R^6 substituents are hydrogen or R^2 and R^4 are both hydrogen;

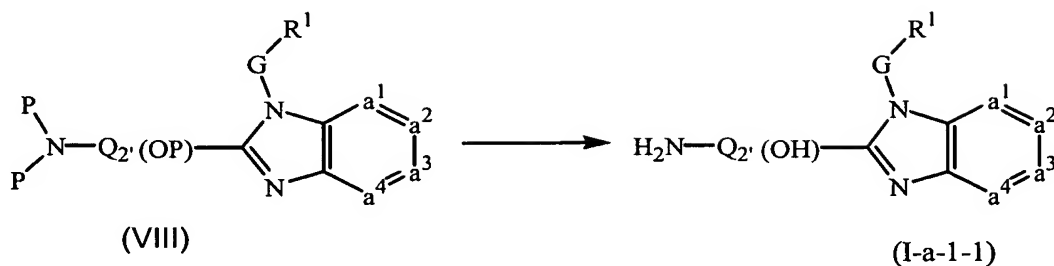
- e) deprotecting an intermediate of formula (VI)



with R^1 , G, and $-a^1=a^2-a^3=a^4-$ defined as in claim 1, and H_2N-Q_2 being defined as Q according to claim 1 provided that both R^6 substituents are hydrogen or R^2 and R^4 are both hydrogen, and P being a protective group;

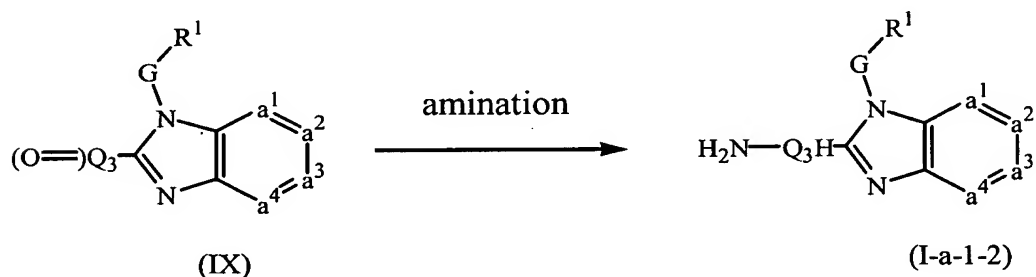
- f) deprotecting an intermediate of formula (VII) or (VIII)





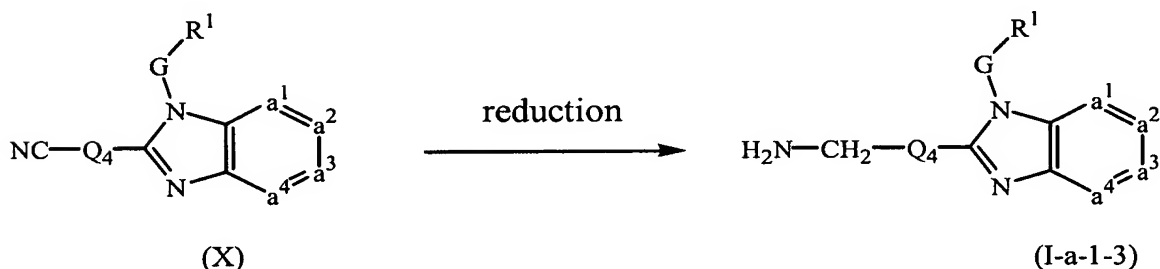
with R^1 , G , and $-a^1=a^2-a^3=a^4-$ defined as in claim 1, $H-Q_1'(OH)$ being defined as Q according to claim 1 provided that R^2 or at least one R^6 substituent is hydrogen and provided that Q comprises a hydroxy moiety, $H_2N-Q_2'(OH)$ being defined as Q according to claim 1 provided that both R^6 substituents are hydrogen or R^2 and R^4 are both hydrogen and provided that Q comprises a hydroxy moiety, and P being a protective group;

g) amination of an intermediate of formula (IX)



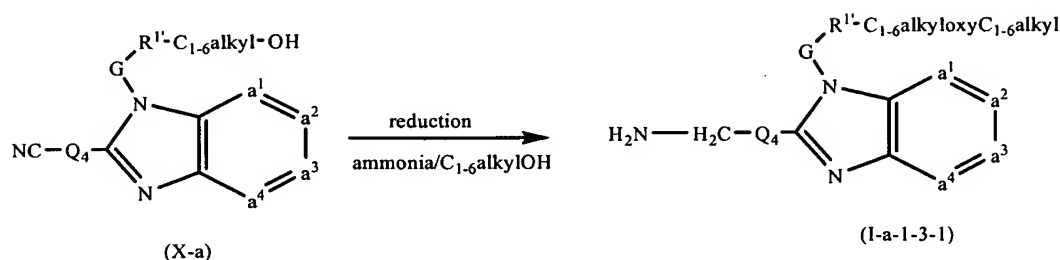
with R^1 , G , and $-a^1=a^2-a^3=a^4-$ defined as in claim 1, and H_2N-Q_3H being defined as Q according to claim 1 provided that both R^6 substituents are hydrogen or R^2 and R^4 are both hydrogen, and the carbon adjacent to the nitrogen carrying the R^6 , or R^2 and R^4 substituents contains at least one hydrogen, in the presence of a suitable amination reagent;

h) reducing an intermediate of formula (X)



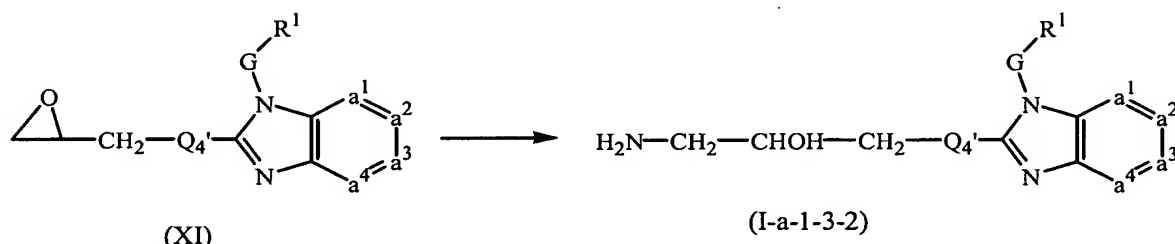
with R^1 , G, and $-a^1=a^2-a^3=a^4-$ defined as in claim 1, and $H_2N-CH_2-Q_4$ being defined as Q according to claim 1 provided that Q comprises a $-CH_2-NH_2$ moiety, in the presence of a suitable reducing agent;

- i) reducing an intermediate of formula (X-a)



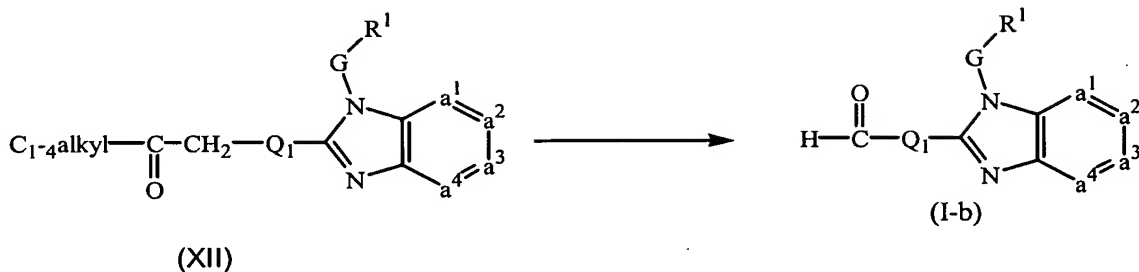
with G, and $-a^1=a^2-a^3=a^4-$ defined as in claim 1, $H_2N-CH_2-Q_4$ being defined as Q according to claim 1 provided that Q comprises a $-CH_2-NH_2$ moiety, and $R^{1'}$ being defined as R^1 according to claim 1 provided that it comprises at least one substituent, in the presence of a suitable reducing agent and suitable solvent;

- j) amination of an intermediate of formula (XI)



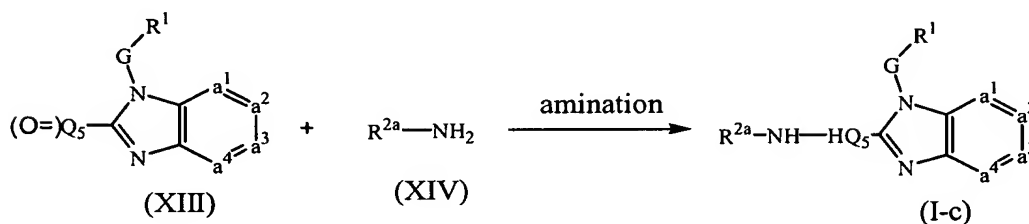
with R^1 , G, and $-a^1=a^2-a^3=a^4-$ defined as in claim 1, and $H_2N-CH_2-CHOH-CH_2-Q_4'$ being defined as Q according to claim 1 provided that Q comprises a $CH_2-CHOH-CH_2-NH_2$ moiety, in the presence of a suitable amination reagent;

- k) reacting an intermediate of formula (XII) with formic acid, formamide and ammonia



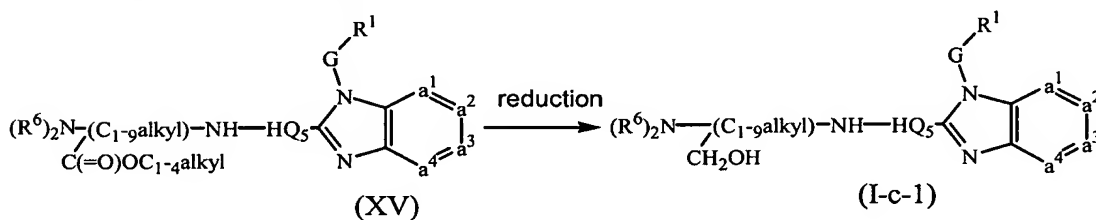
with R^1 , G , and $-a^1=a^2-a^3=a^4-$ defined as in claim 1, and $H-C(=O)-Q_1$ being defined as Q according to claim 1 provided that R^2 or at least one R^6 substituent is formyl;

- l) amination of an intermediate of formula (XIII) by reaction with an intermediate of formula (XIV)



with R^1 , G , and $-a^1=a^2-a^3=a^4-$ defined as in claim 1, and $R^{2a}-NH-HQ_5$ being defined as Q according to claim 1 provided that R^2 is other than hydrogen and is represented by R^{2a} , R^4 is hydrogen, and the carbon atom adjacent to the nitrogen atom carrying the R^2 and R^4 substituents, carries also at least one hydrogen atom, in the presence of a suitable reducing agent;

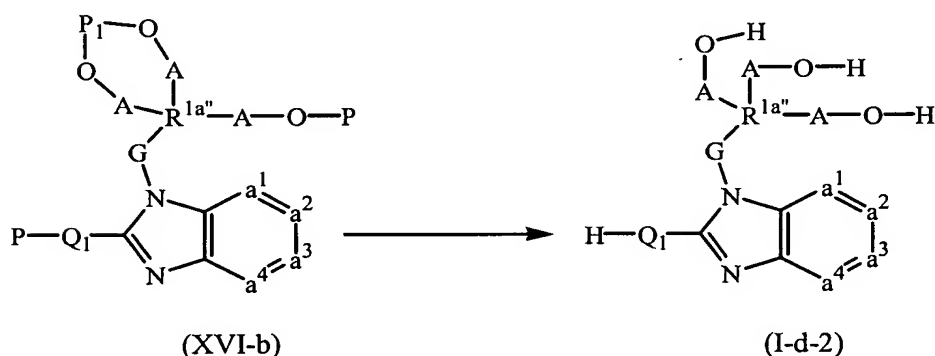
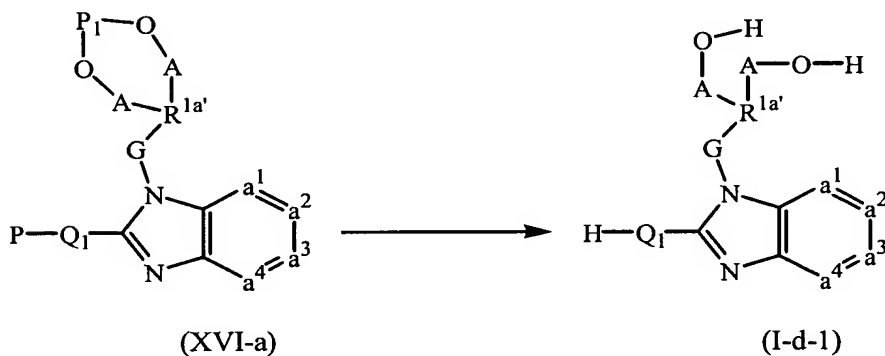
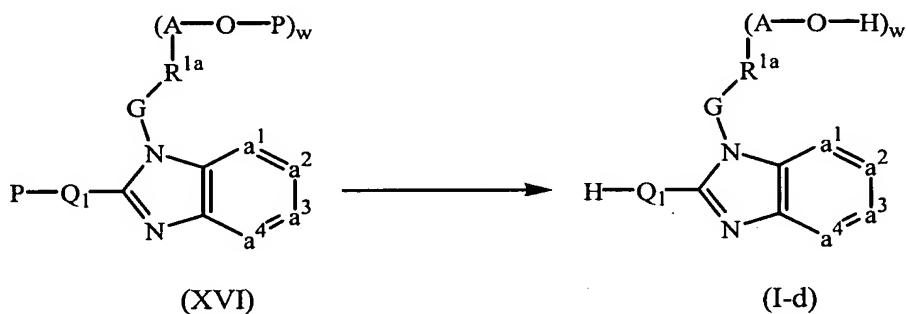
- m) reducing an intermediate of formula (XV)



with R^1 , G , and $-a^1=a^2-a^3=a^4-$ defined as in claim 1, and $(R^6)_2N-[(C_{1-9}alkyl)CH_2OH]-NH-HQ_5$ being defined as Q according to claim 1 provided that R^2 is other than hydrogen and is represented by $C_{1-10}alkyl$ substituted with $N(R^6)_2$ and with hydroxy, and the carbon atom carrying the hydroxy, carries also two hydrogen atoms, and provided that R^4 is hydrogen,

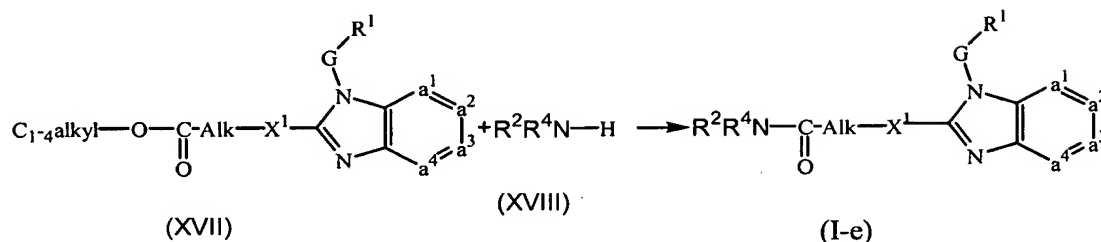
and the carbon atom adjacent to the nitrogen atom carrying the R^2 and R^4 substituents, carries also at least one hydrogen atom, with a suitable reducing agent;

- n) deprotecting an intermediate of formula (XVI), (XVI-a) or (XVI-b)



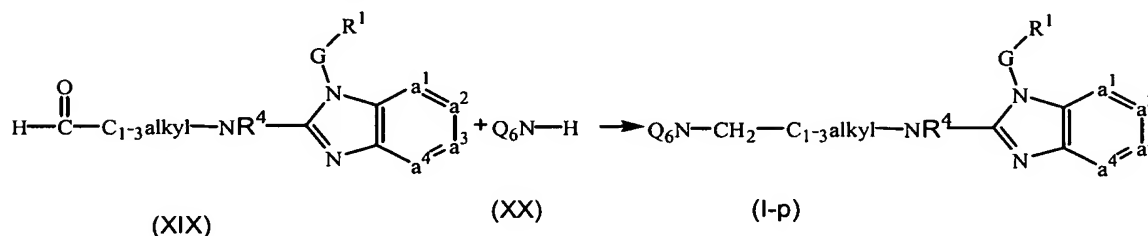
with G , and $-a^1=a^2-a^3=a^4-$ defined as in claim 1, and $H-Q_1$ being defined as Q according to claim 1 provided that R^2 or at least one R^6 substituent is hydrogen, and $R^{1a}-(A-O-H)_w$, $R^{1a'}-(A-O-H)_2$ and $R^{1a''}-(A-O-H)_3$ being defined as R^1 according to claim 1 provided that R^1 is substituted with hydroxy, hydroxy C_{1-6} alkyl, or $HO(-CH_2-CH_2-O)_n-$, with w being an integer from 1 to 4 and P or P_1 being a suitable protecting group, with a suitable acid;

- o) amination of an intermediate of formula (XVII)



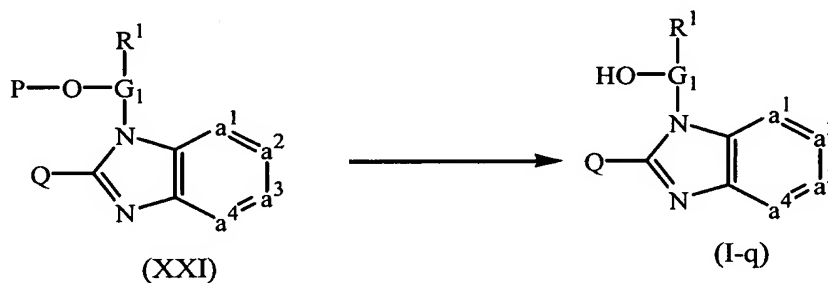
with R^1 , G, $-\text{a}^1=\text{a}^2-\text{a}^3=\text{a}^4-$, Alk, X^1 , R^2 and R^4 defined as in claim 1, in the presence of a suitable amination agent;

- p) amination of an intermediate of formula (XIX)



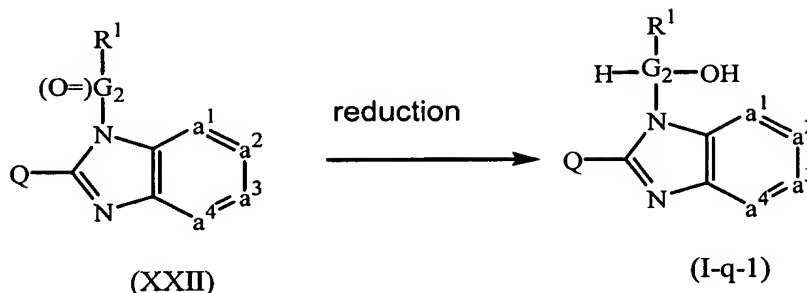
with R^1 , G, and $-\text{a}^1=\text{a}^2-\text{a}^3=\text{a}^4-$ defined as in claim 1, and $\text{Q}_6\text{N}-\text{CH}_2-\text{C}_{1-3}\text{alkyl}-\text{NR}^4$ being defined as Q according to claim 1 provided that in the definition of Q, X^2 is $\text{C}_{2-4}\text{alkyl}-\text{NR}^4$, in the presence of a suitable amination agent;

- q) deprotecting an intermediate of formula (XXI)



with R^1 , Q, and $-\text{a}^1=\text{a}^2-\text{a}^3=\text{a}^4-$ defined as in claim 1, and $\text{HO}-\text{G}_1$ being defined as G according to claim 1 provided that G is substituted with hydroxy or $\text{HO}-(\text{CH}_2\text{CH}_2\text{O})_n$; and

- r) reducing an intermediate of formula (XXII)



with R^1 , Q, and $-a^1=a^2-a^3=a^4-$ defined as in claim 1, and H-G₂-OH being defined as G according to claim 1 provided that G is substituted with hydroxy and the carbon atom carrying the hydroxy substituent carries also at least one hydrogen, in the presence of a suitable reducing agent.

14. *(cancelled)*

15. *(cancelled)*

16. *(currently amended)* The process of claim 13, further comprising the step of converting compound of formula **(I)** (**(A)**), stereochemically isomeric forms, metal complexes, quaternary amines or *N*-oxide forms thereof, into a therapeutically active non-toxic acid addition salt by treatment with an acid.

17. *(currently amended)* The process of claim 13, further comprising the step of converting compound of formula **(I)** (**(A)**), stereochemically isomeric forms, metal complexes, quaternary amines or *N*-oxide forms thereof, into a therapeutically active non-toxic base addition salt by treatment with alkali.

18. *(currently amended)* The process of claim 13, further comprising the step of converting the acid addition salt form of compound of formula **(I)** (**(A)**), stereochemically isomeric forms, metal complexes, quaternary amines or *N*-oxide forms thereof, into the free base by treatment with alkali.

DOCKET NO.: JAB-1500/JANS-0028
Application No.: 10/019,376
Notice of Allowance Dated: July 15, 2005

PATENT

19. (*currently amended*) The process of claim 13, further comprising the step of converting the base addition salt form of compound of formula (I) (~~(I²)~~), stereochemically isomeric forms, metal complexes, quaternary amines or *N*-oxide forms thereof, into the free acid by treatment with acid.